

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-18 (Canceled).

Claim 19 (New): A catalytically active composition comprising an active component having the formula



wherein  $\text{Y} = \text{Au}$  or  $\text{Rh}$ ,

and wherein the indices  $a$ ,  $c$  and  $d$  indicate the mass ratios of the respective elements and  $0.1 \leq a \leq 3$ ,  $0.1 \leq c \leq 3$  and  $0 \leq d \leq 1$ ,  
on silicon carbide or steatite as carrier.

Claim 20 (New): A catalytically active composition comprising an active component having the formula



wherein the indices  $a$ ,  $b$ ,  $c$  indicate the mass ratios of the respective elements and  $0.1 \leq a \leq 3$ ,  $0 \leq b \leq 3$  and  $0.1 \leq c \leq 3$ ,  
on silicon carbide or steatite as carrier.

Claim 21 (New): A catalytically active composition comprising an active component having the formula



wherein  $a$  and  $c$  indicate the mass ratios of the respective elements and  $0.1 \leq a \leq 3$  and  $0.1 \leq c \leq 3$ ,  
on silicon carbide or steatite as carrier.

Claim 22 (New): A catalytically active composition comprising an active component having the formula



wherein  $\text{Z} = \text{Ag}$  or  $\text{Pt}$ ,

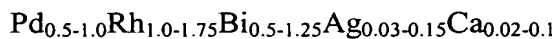
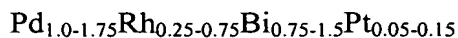
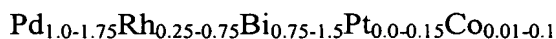
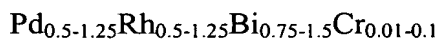
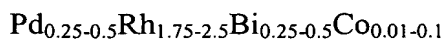
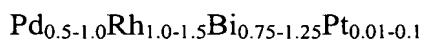
and wherein the indices  $a$ ,  $b$ ,  $c$  and  $e$  indicate the mass ratios of the respective elements and  $0.1 \leq a \leq 3$ ,  $0 \leq b \leq 3$ ,  $0.1 \leq c \leq 3$  and  $0 \leq e \leq 1$ ,  
on silicon carbide or steatite as carrier.

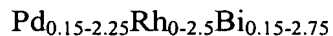
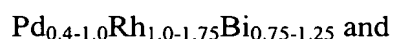
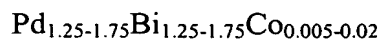
Claim 23 (New): A catalytically active composition comprising an active component having the formula



wherein the indices  $a$ ,  $c$  and  $e$  indicate the mass ratios of the respective elements and  $0.1 \leq a \leq 3$ ,  $0.1 \leq c \leq 3$  and  $0 \leq e \leq 1$ ,  
on silicon carbide or steatite as carrier.

Claim 24 (New): A catalytically active composition comprising an active component having a formula selected from the group consisting of:





on a carrier, wherein the indices indicate the mass ratios of the respective elements.

Claim 25 (New): A method of using a catalytically active composition comprising an active component of the formula  $\text{Pd}_a\text{Bi}_c\text{Y}_d$  according to claim 19 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 26 (New): The method according to claim 25 wherein the cyclic or acyclic carbonyl compound is selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.

Claim 27 (New): A method of using a catalytically active composition comprising an active component of the formula  $\text{Pd}_a\text{Rh}_b\text{Bi}_c$  according to claim 20 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 28 (New): The method according to claim 27, wherein the cyclic or acyclic carbonyl compound is selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.

Claim 29 (New): A method of using a catalytically active composition comprising an active component of the formula  $\text{Pd}_a\text{Bi}_c$  according to claim 21 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 30 (New): The method according to claim 29, wherein the cyclic or acyclic carbonyl compounds are selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.

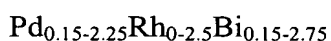
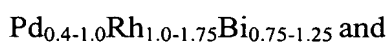
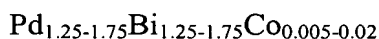
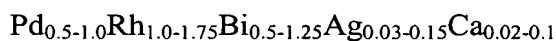
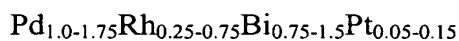
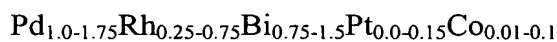
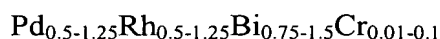
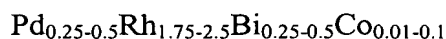
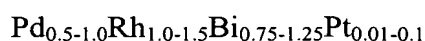
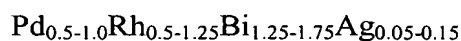
Claim 31 (New): A method of using a catalytically active composition comprising an active component of the formula  $\text{Pd}_a\text{Rh}_b\text{Bi}_c\text{Z}_e$  according to claim 22 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 32 (New): The method according to claim 31, wherein the cyclic or acyclic carbonyl compounds are selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.

Claim 33 (New): A method of using a catalytically active composition comprising an active component of the formula  $\text{Pd}_a\text{Bi}_c\text{Co}_e$  according to claim 23 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 34 (New): The method according to claim 33, wherein the cyclic or acyclic carbonyl compounds are selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.

Claim 35 (New): A method of using a catalytically active composition comprising an active component having a formula selected from the group consisting of:



according to claim 24 on a carrier for the dehydrogenation of cyclic or acyclic carbonyl compounds to the corresponding  $\alpha,\beta$ -unsaturated carbonyl compounds.

Claim 36 (New): The use according to claim 35, wherein the cyclic or acyclic carbonyl compounds are selected from the group consisting of cyclopentanone, butanone, butyraldehyde, cyclohexanone and isovaleraldehyde.